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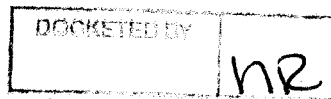
BEFORE THE ARIZONA CORPORATION COMMISSION

1 BOB STUMP
2 Chairman
3 GARY PIERCE
4 Commissioner
5 BREND A BURNS
6 Commissioner
7 BOB BURNS
8 Commissioner
9 SUSAN BITTER SMITH
10 Commissioner
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Arizona Corporation Commission

DOCKETED

JUL 30 2013



IN THE MATTER OF THE APPLICATION
OF TUCSON ELECTRIC POWER
COMPANY FOR APPROVAL OF A
RENEWABLE ENERGY POWER
PURCHASE AGREEMENT WITH RED
HORSE WIND 2, LLC.

DOCKET NO. E-01933A-13-0056

DECISION NO. 74014

ORDER

Open Meeting
July 17, 2013 and July 18, 2013
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Tucson Electric Power Company ("TEP" or "Company") is certificated to provide electric service within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission ("Commission").

BACKGROUND

2. On March 12, 2013, TEP filed an application for approval by the Commission of a renewable energy power purchase agreement ("Red Horse Wind PPA" or "PPA") between TEP and Red Horse Wind 2, LLC ("Red Horse Wind"). The PPA will allow TEP to purchase 51 megawatts ("MW") of wind energy and up to 3 MW of solar energy and the associated Renewable Energy Credits ("RECs") from Red Horse Wind in accordance with the Commission's Renewable Energy Standard and Tariff ("REST") A.A.C. R14-2-1804(G). A complete version of the PPA was provided to Staff under a confidentiality agreement.

3. In Decision No. 71856, dated September 1, 2010, TEP received approval from the Commission that the nine PPA's TEP was purchasing would be an appropriate component of TEP's energy portfolio and compatible with TEP's 2010 REST implementation plan. In that same Decision, TEP was required by the Commission to hold a Request for Proposal ("RFP") process to procure at least 50 MW of wind power from an in-state wind generator and to file those results with the Commission for review in the Company's 2012 REST implementation plan.

4. In June of 2011, TEP issued an RFP for 50 MW of in-state wind energy. In Decision No. 72551, dated August 24, 2011, TEP was granted an extension on the timeline to file the RFP results with the Commission until September 15, 2011. On September 15, 2011, the Company submitted the summaries of the results from its RFP process to Commission Utility Division Staff.

5. The RFP process utilized the Accion Group, Inc. as the independent monitor to oversee the process and to maintain an unbiased bidding environment. The original ten submissions were evaluated on a variety of criteria; however, the final selection was made based on cost, cost-effectiveness, water consumption, location, bidder's credit, bidder's risk analysis and project completion viability.

6. In October 2011, TEP selected Red Horse Wind and began contract negotiations with Red Horse Wind for 50 MW of wind-powered electric generation ("Red Horse Wind Facility"). The PPA for the Red Horse Wind Facility was executed on February 20, 2013. The PPA would allow TEP to procure a majority of the output of the Red Horse Wind Facility. The agreement will be in effect for a period of 20 years but would not be in service prior to December 2014. TEP anticipates the PPA will provide it with approximately 1.5% of the total 15% Renewable Energy Requirement established in the REST rules. TEP believes it will provide ratepayers with a reasonably priced energy source into the future.

7. Red Horse Wind is a subsidiary of Torch Renewable Energy, LLC ("Torch"), a limited liability corporation with offices in Houston, Texas. Torch is a wind energy project developer with more than 12 projects in various stages of development in seven States, representing greater than 1,400 MW of future wind generation capacity. Torch is a wholly-owned

1 subsidiary of Torch Energy Advisors Incorporated ("TEAI"). TEAU is a diversified energy
2 company with 27 years of experience developing, acquiring, and operating over \$10 billion of oil
3 and gas properties, gas pipelines and processing facilities, oil and gas services businesses, and
4 renewable energy projects.

5 **TEP's REQUEST**

6 8. In its application, TEP specifically requested that the Commission make the
7 following findings:

- 8 a. That the PPA was selected through a fair and competitive procurement process;
9 b. That the PPA will provide energy that is an Eligible Renewable Energy
10 Resource pursuant to A.A.C. R14-2-1802;
11 c. That the PPA is an appropriate component of TEP's energy portfolio and is
12 compatible with appropriate implementation plans under the REST rules;
13 d. That the PPA is a reasonable means of complying with the long-term REST
14 requirements and that TEP's participation in the PPA is in the public interest;
15 and
16 e. That with respect to any subsequent inquiry into the prudence of the PPA, the
17 expense of renewable energy purchased under the PPA should not be deemed
18 imprudent solely because the expense is greater than that of other generation, or
19 because it exceeds the REST requirements.

20 **REST REQUIREMENTS**

21 9. The REST rules specify eligibility as follows:

22 **R14-2-1802(A)**

23 "Eligible Renewable Energy Resources" are applications of the following defined
24 technologies that displace Conventional Energy Resources that would otherwise be used to
25 provide electricity to an Affected Utility's Arizona Customers.

26 **R14-2-1802(A)(10)**

27 "Solar Electricity Resources" use sunlight to produce electricity by either photovoltaic
28 devices or solar thermal electric resources.

R14-2-1802(A)(11)

“Wind Generator” is a mechanical device that is driven by wind to produce electricity.

10. The REST rules require that a portion of an electric utility’s retail kilowatt-hour (“kWh”) sales be generated from renewable resources. The rules allow utilities to meet the requirement through a combination of utility-owned generation, purchase of renewable energy distributed energy (“DE”), or purchase of RECs from other entities. Since energy produced from the Red Horse Wind Facility would be generated from wind, and possibly solar, and because both wind and solar resources are included as Eligible Energy Resources in the rules, Staff believes that the PPA is an Eligible Energy Resource pursuant to R14-2-1802. The PPA that TEP has proposed in this application would comply with the requirements of the REST rules.

DETAILED DESCRIPTION OF PROPOSED FACILITY

11. The Red Horse Wind Facility will be located approximately 15 miles west of Wilcox, Arizona in Cochise County. The property in which the project will be located is currently owned by Warbonnet Ranches, LLC and the Arizona State Land Trust. The land is sparsely populated and is currently used for cattle grazing which will continue when the wind facility is operational. The land currently owned by Warbonnet Ranches, LLC will be under a long-term Wind Energy Lease and Easement, and the land owned by the State of Arizona will be under a long-term Right of Way agreement.

12. Red Horse Wind will construct and own, operate and maintain, or will arrange for the operation and maintenance of the facility. The facility will consist of wind, solar and/or other resource-powered electric generating plant with an installed capacity of approximately 71 MW. At a minimum, 51 MW of the total installed capacity will be wind-powered electric generation for TEP. The remaining 20 MW of capacity may be contracted with parties other than TEP.

13. To reach the 51 MW of total installed capacity, Red Horse Wind will operate approximately 30 turbines running at a net capacity factor of 31% with net production of approximately 130,000 MWh per year. The wind turbines will be up to 487 feet in total height with a blade diameter of 191.5 feet. Once completed, the wind turbines are not expected to require any water consumption for operation.

14. Red Horse Wind intends to interconnect into TEP's transmission system at the existing Winchester 345 kV substation. To complete that interconnection, Red Horse Wind will need to construct a 7.5 mile low voltage radial generator lead line across state land. The 34.5 kV generator lead line will be constructed in accordance with the terms of an Interconnection Agreement with TEP. Red Horse Wind will be responsible for all costs and expenses related to the interconnection facilities at the Red Horse Wind Facility including the interconnection point and the installation and maintenance of metering equipment up to \$5 million. If a determination is made that the interconnection costs will exceed \$5 million, the PPA provides both parties with options and/or early termination rights.

DETAILED DESCRIPTION OF THE PPA

15. TEP has entered into a 20-year PPA with Red Horse Wind. TEP has agreed to purchase approximately 51 MW of the electrical output (and associated RECs) generated by the facility up to the contract capacity which is defined as the installed capacity of up to 51 MW equal to the nameplate capacity of the wind turbines and including at Red Horse Wind's discretion up to 3 MW of solar-powered generation within that 51 MW of capacity. TEP will receive the energy at its Winchester 345 kV substation. The price of the energy (with the associated RECs) is fixed for the 20-year life of the PPA.

16. When comparing the purchase price to TEP's forecasted 20-year levelized Market Cost of Comparable Conventional Generation ("MCCCG") for Arizona wind production estimated to be approximately \$60 per MWh, Staff is in agreement that the Red Horse Wind agreement will add approximately \$1,200,000 to the REST budget in 2015.

17. The scheduled commercial operation date will be the later of April 1, 2015 or 30 days after completion of the Interconnection Facilities. Based on the noted 31% capacity factor and line loss approximations, TEP estimates receiving 130,000 MWh of electric energy per year. This annual production quantity is based on an estimate of the facility's nameplate rating multiplied by the number of hours in a year multiplied by the facility's anticipated capacity factor. The capacity factor is a measure of the expected energy production by the facility over the course of an entire year. Capacity factor is the annual expected total energy production from the facility

1 divided by the energy that would be produced should the facility run at full output over the year.
2 Capacity factor for a wind energy facility is primarily an indication of how robust the wind
3 resource at the site is expected to be.

4 18. The PPA clearly defines the overall project schedule including the commencement
5 of construction and the scheduled commercial operation date. The PPA also incorporates
6 provisions for liquidated damages if these dates are not met.

7 19. The PPA also details scheduling and delivery provisions with language explaining
8 force majeure events. TEP's requirement under this agreement is to accept delivery of all or a
9 portion of the electricity output at the delivery point. Output will be measured at the delivery
10 point.

11 **RENEWABLE ENERGY CREDIT ANALYSIS**

12 20. As noted earlier, the REST rules require electric utilities to obtain energy from
13 renewable sources such as wind, solar, and geothermal generation. The output from these
14 renewable sources count toward meeting the renewable energy requirements outlined in the REST.
15 As can be seen in the table below, given an estimate of sales through 2017, the total renewable
16 requirement for TEP in 2017 would be approximately 687,000 MWh.

17 21. The most recent data summarizing TEP's compliance with the REST rules can be
18 seen in the amended 2013 REST Compliance Report filed on May 6, 2013, in Docket No. E-
19 01933A-11-0269. The compliance report details the utility scale generation, contracts, and output
20 associated with the residential and non-residential DE. In 2012, TEP reported a total for
21 renewable energy supply including annualized production and reservations of 481,464 MWh. TEP
22 retired 315,353,000 RECs toward meeting its 2012 renewable energy requirement. The report also
23 indicated a remaining balance of 75,163 MWh was carried forward into 2013.

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TEP ESTIMATED RENEWABLE ENERGY REQUIREMENTS					
	2013	2014	2015	2016	2017
Forecast Retail Sales MWh	9,405,022	9,565,143	9,658,045	9,739,655	9,813,955
% Renewable Energy Required	4.0%	4.5%	5.0%	6.0%	7.0%
Overall Renewable Requirement MWh	376,201	430,431	482,902	584,379	686,977
DE Residential Requirement MWh	56,430	64,565	72,435	87,657	103,047
DE Non-Residential Requirement MWh	56,430	64,565	72,435	87,657	103,047

22. One consideration for Staff when reviewing the PPA for the Red Horse Wind Facility was the need for additional renewable energy into the future to meet the established renewable energy requirements. When the Red Horse Wind Facility comes online in 2015, it would add approximately 130,000 MWh toward meeting the overall renewable requirement. Given the level of generation TEP currently has in place and the term of those agreements, Staff was able to estimate the output for that level of generation through 2025.

23. Staff's analysis utilized a constant sales growth year after year of 1%. Given the increase in the standard each year through 2025, TEP's estimated overall renewable energy requirement in MWh by the end of 2025 is 1,594,066. If TEP only meets the minimum DE requirement for both residential and non-residential segments, its existing level of utility scale renewable generation will not be sufficient to meet the 15% renewable energy requirement established for 2025. By incorporating the Red Horse Wind Facility in 2015, Staff's analysis estimates TEP will be able to meet the overall renewable energy requirement through 2021. Staff believes the Red Horse Wind Facility will enable TEP to meet the renewable energy requirements into the future.

TYPICAL BILL ANALYSIS

24. In the Company's application, it stated that the PPA will add approximately \$1,200,000 to the annual REST budget in 2015 when the Red Horse Wind Facility becomes operational. The 2013 REST Plan approved in Decision No. 73637 (dated January 31, 2013) set the total amount to be recovered through the REST surcharge at \$35,779,502.

1 25. Staff estimates the bill impact of the PPA in 2015 for an average residential
2 customer using 900 kWh per month to be \$0.20 if the caps were increased by 5%.

3 26. Each year TEP recalculates the MCCCCG for purposes of estimating the amount of
4 the PPA which flows through the Purchased Power and Fuel Adjustment Charge ("PPFAC")
5 versus how much flows through the REST budget. As noted above, the PPA for the Red Horse
6 Wind Facility will increase the REST budget by approximately \$1,200,000 based on a MCCCCG of
7 \$60.00 per MWh.

8 27. Staff recognizes that there are many factors contributing to the overall REST
9 surcharge calculation that are difficult to estimate two years out, including forecasted sales
10 volumes, estimated REST surcharge carryover balance, MCCCCG, and any adjustments to the caps
11 in place for the current REST surcharge. All of these factors will affect the final determination in
12 2015 of the actual monthly bill impact of the increase from the Red Horse Wind PPA.

13 **OTHER REGULATORY MATTERS**

14 28. In addition to Commission approval of the subject application, Red Horse Wind is
15 required to obtain local, state, and federal permits or approvals to construct this facility. To date,
16 TEP is aware that Red Horse Wind is in the process of obtaining the following permits: Right of
17 Way from the Arizona State Land Department and Cochise County, Special Use Permit and
18 Building Permit from Cochise County, and a Determination of No Hazard from the Federal
19 Aviation Administration.

20 29. TEP anticipates the low voltage generator lead line to be a 34.5 kV line tying into
21 the Winchester substation so line siting approval is not required.

22 30. There have been no concerns expressed to TEP with regard to the presence or
23 construction of this wind facility. Red Horse Wind has been working with environmental
24 consultants to determine any environmental and local wildlife impacts. Red Horse Wind has also
25 engaged in discussions with Arizona Game and Fish and the U.S. Fish and Wildlife Services to
26 minimize environmental impacts.

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STAFF FINDINGS AND RECOMMENDATIONS

31. Based on Staff's review of the detail surrounding the Order to begin an RFP process, the subsequent filing of the RFP results and the criteria used in the evaluation and final selection, the Red Horse Wind PPA was selected through a fair and competitive procurement process.

32. The Red Horse Wind PPA would meet the requirements of an Eligible Renewable Energy Resource pursuant to R14-2-1802 and the generation from the facility would apply toward TEP's obligation under the Renewable Energy Standard.

33. Staff's recommendations in this matter do not address the prudence of the PPA or otherwise address its ratemaking treatment. In any subsequent inquiry into the prudence of the PPA, the expense of renewable energy purchases under the PPA should not be deemed imprudent only because the expense is greater than that of conventional generation, or because it exceeds the REST requirements.

34. In the future, Staff will be reviewing the practice of TEP selling RECs to other parties with respect to the effect that practice may be having on the TEP REST surcharge and the overall cost of TEP's compliance with the REST rules.

CONCLUSIONS OF LAW

1. Tucson Electric Power Company is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over Tucson Electric Power Company and over the subject matter of the Application.

3. The Commission, having reviewed the application and Staff's Memorandum dated May 28, 2013, concludes that it is in the public interest to adopt Staff's recommendations.

ORDER

IT IS THEREFORE ORDERED that the Red Horse Wind PPA fulfills the requirements of completing an RFP process for 50 MW of in-state wind generation detailed in Decision No. 71856.

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1 IT IS FURTHER ORDERED that the energy provided through the Red Horse Wind
2 Facility would meet the requirements of an Eligible Renewable Energy Resource pursuant to R14-
3 2-1802.

4 IT IS FURTHER ORDERED that this Decision does not address the prudence of the Red
5 Horse Wind PPA or its ratemaking treatment.

6 IT IS FURTHER ORDERED that in any subsequent inquiry into the prudence of the Red
7 Horse Wind PPA, the expense of renewable energy purchased under the PPA shall not be deemed
8 imprudent only because the expense is greater than that of conventional generation, or because it
9 exceeds the REST requirements.

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1 IT IS FURTHER ORDERED that included with the reporting requirement in Decision No.
2 72033, dated December 10, 2010, on page 20 lines 6-9, which outlined the reporting of any
3 liquidated damages cases within the previous three calendar years, Tucson Electric Power
4 Company shall also make a recommendation for the disposition of the proceeds, and if applicable
5 inform the Commission of the measures Tucson Electric Power Company intends to take in order
6 to comply with the REST requirements in light of the existing circumstances."

7 IT IS FURTHER ORDERED that this Decision is not intended to address approval of the
8 Red Horse Wind PPA.

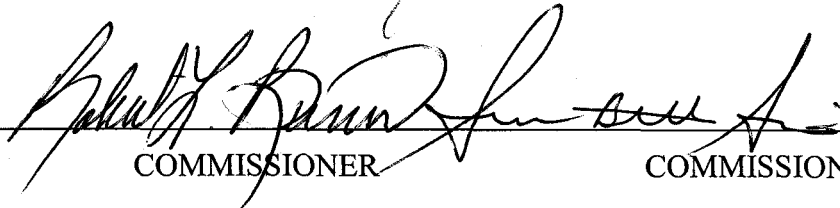
9 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

10 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

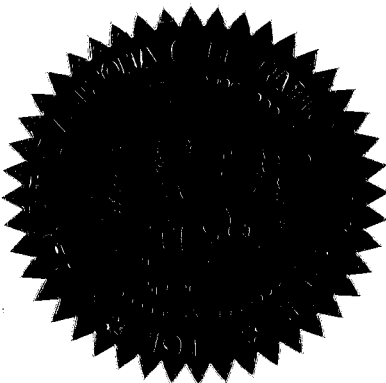
11 
12 CHAIRMAN

13 
14 COMMISSIONER

15 COMMISSIONER

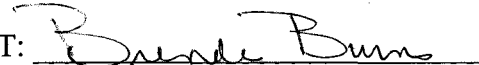
16 
17 COMMISSIONER

18 COMMISSIONER



20 IN WITNESS WHEREOF, I, JODI JERICH, Executive
21 Director of the Arizona Corporation Commission, have
22 hereunto, set my hand and caused the official seal of this
23 Commission to be affixed at the Capitol, in the City of
24 Phoenix, this 30th day of July, 2013.

25 
26 JODI JERICH
27 EXECUTIVE DIRECTOR

28 DISSENT: 

DISSENT: _____

SMO:RSP:sms\CHH

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